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RUINS AT AZTEC AND ON THE RIO LA PLATA, NEW MEXICO

By WARREN K. MOOREHEAD

In the spring of 1892 the writer conducted an expedition, with a personnel of eleven men, through the San Juan country in northern New Mexico. Some years later Dr T. Mitchell Prudden visited portions of the same territory and has described the ruins observed,¹ but as the archeological remains at Aztec and on the Rio La Plata have not been fully described by more recent observers, I present such of my original notes as relate to them. Our expedition was accompanied by a civil engineer, Mr Clinton Cowen, with two assistants.

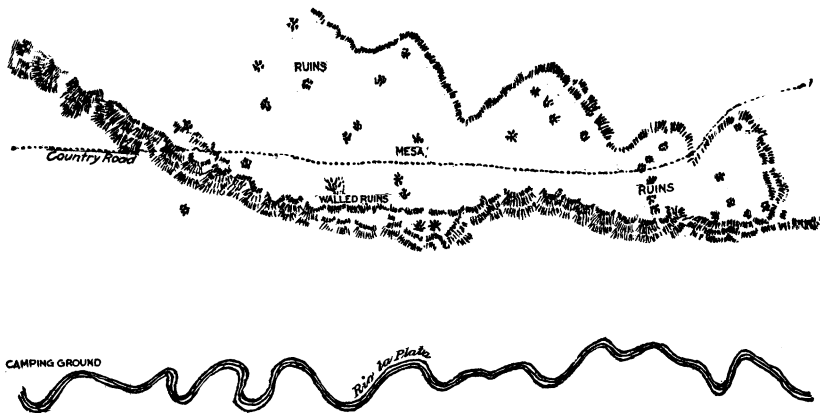


FIG. 74. — A mile of ruins on La Plata river.

At the time of these observations the ruins at Aztec were owned by Mr John Koontz, who permitted us to survey them, but would allow no extensive excavations. These ruins form a most imposing pile of masonry, and are the principal landmark in the valley of the Rio de las Animas for miles around. From their walls toward the west can be seen the beautiful snow-clad peaks of the La Plata range, seventy miles distant; to the eastward extend the lowlands

¹ *American Anthropologist*, vol. 5, no. 2, April-June 1904.

with the barren mesa for a background, and toward the north and south winds the Animas river. Our work at these ruins occupied two weeks.

There are two chief buildings, with a small one between and several others near by. The smaller ones were constructed of bowlders, and belonged to that numerous class known as "boulder ruins" to distinguish them from buildings constructed of quarried stone. Scattered at intervals about the valley, near the ruins, are accumulations of earth and stone, resembling natural deposits, but close scrutiny reveals their artificial origin. About midway between the eastern and western divisions of the pueblo are ruins of a large kiva, surrounded on all sides by a series of small rooms. This kiva is of the same dimensions as several others occurring within the pueblos, approximating 35 feet, but its isolated position between the two ruins gives it greater interest.

The upper portions of the walls of the western ruin were in a poor state of preservation, and leaned to such an extent that we feared they might fall at almost any moment. In all probability when next the ruins are visited the walls will be found mingled with the mass of debris beneath. At the time of our examination it was readily determined that these walls once formed the third story of the pueblo, and, judging from the heaps of fallen stone, that the building must have been originally about four stories in height. While most of the upper walls had fallen, the heavy masonry and solid floors of the first and second stories remained intact. The piles of stone and earth, accumulated above them to a height of many feet, converted the lower stories into what were practically underground rooms. Communication from one to the other was afforded by means of openings large enough only for a person to creep through.

The western or large pueblo covers an area of about 60,000 square feet, and had an average height at the main front of eighteen feet, making in all about 16,000 perches or 400,000 cubic feet of masonry. The eastern pueblo averaged somewhat less than this, but its dilapidated condition made it impossible to give exact measurements in the limited time at our disposal. It would require a month to survey it in detail. The only chambers that could be distinguished were the seven kivas, which closely resembled those

of the western pueblo. The eastern pueblo is either considerably the older of the two or it was built in a less substantial manner, for at the time of our visit it was little more than an enormous heap of stones.

One of the most interesting features observed in connection with this remarkable group of ruins was that the quarries from which the soft stone used in the walls was obtained occur at a distance of about two miles. A broad trail or road leads from the ruins over-

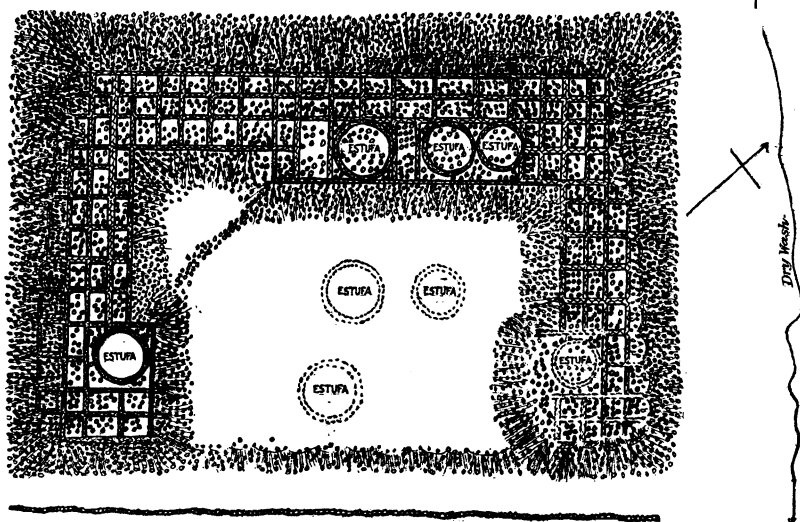


FIG. 75. — Plan of the western pueblo at Aztec, New Mexico.

the hills, across the valley, and back to the mesa where the quarries are. Numerous broken axes of rude form, stone hammers, and other quarrying tools have been found on the site. The trail does not follow the easy grades, but passes directly over a high and steep slope of the mesa, elevated perhaps 150 feet above the plain, and bears every evidence of having been well traveled.

The lower stories of the western ruin were in an excellent state of preservation. Throughout most of their extent the walls were of three stories, and with the exception of the lower portions facing the river, in no place were they less than two stories in height. The walls were composed of stones about as large as the ordinary granite paving blocks used in our cities today. The beams separating the

second story from the lower rooms were very heavy and well preserved. It was possible to creep through one of several openings into these lower rooms, and pass from one chamber to another until one had entered twenty or thirty apartments 10 by 12 feet and 8 feet in height, to several large ones 14 by 16 feet and 10 feet in height. I have seldom seen larger rooms in any of the Southwestern ruins.

The accompanying plan (fig. 75), drawn by Mr Cowen, will afford a good idea of the western pueblo. The outlines of eight kivas will be observed. In making the survey Mr Cowen was greatly handicapped by fallen walls and the completely ruined condition of some parts of the buildings. In places the accumulation of debris reached a height of twenty-three feet.

The valley of La Plata is narrower than that of the Animas, and is more fertile, making it a promising fruit and cattle country. In ancient times it was evidently thickly inhabited — quite likely by the same people that lived along the San Juan, since the architecture as well as the artifacts of the two regions are identical.

The number of rooms in the various ruins ranged from one to fifty. Sandstone slabs, as near the desired form as could be found, were used in the masonry. Many of these evidently did not fit well and were chipped or blocked into shape.

The ancient occupants of these structures irrigated hundreds of acres of the surrounding land. One could still trace the outlines of some of the ditches for several miles, in spite of the ever-shifting sand. The ancient farmer extended his ditches along the base of the mesa, not high up on its side as does the white ranchman of to-day. As the Rio La Plata has a rapid fall, it was not necessary for the ancient inhabitants to build a dam far above the tract they desired to irrigate. From the main canal, which seemingly was used in common, the people ran small acequias, or "laterals," and from these still smaller ditches to the individual garden beds. I say garden beds, for there was superficial evidence of thousands of small plots that had once been under cultivation and which lay some feet below the surrounding surface; but occasionally in the spring, when the melting snows of the Rockies swell the river to a raging torrent, the sand above in some places is washed away, ex-

posing what appear to have been garden beds much like those seen near our modern cities.

When watered, vegetation grows rapidly in this region. The owner of the land on which we were encamped gathered all his garden produce in six weeks from the time of planting. Without irrigation the soil is valueless, but with judicious flooding three crops a year

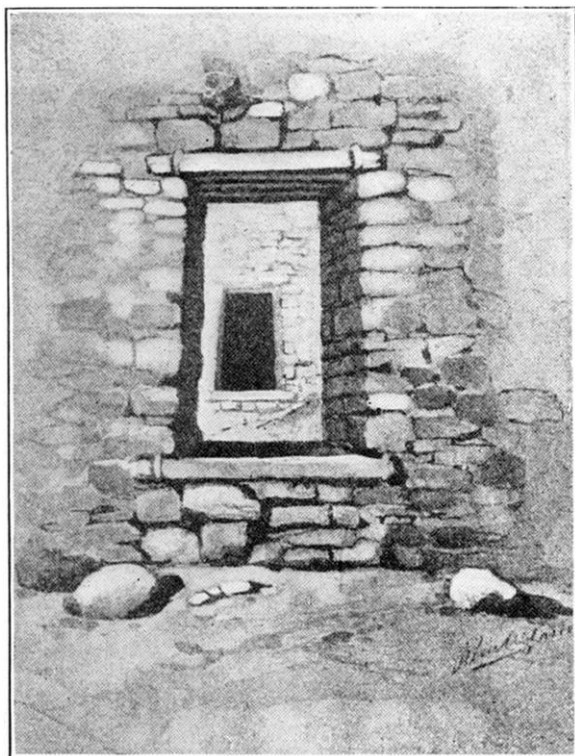


FIG. 76. — Doorways in the pueblo at Aztec, New Mexico.

may be produced. It is only by appreciating these facts that the dweller in the humid region can understand how a large population could have lived in so desert a land. The ancient Pueblos were not wanderers, seeking whomsoever they might prey upon, but lived in substantially built houses of stone or adobe and subsisted largely by agriculture, much as do their descendants to-day.

Farther up the Rio La Plata, where in summer the stream becomes so insignificant that one may leap across it, the region is likewise interesting to the archeologist. From a high point on the mesa the view is strange and fascinating. Little vegetation except piñon, cacti, and sagebrush can be seen. As far as the eye can reach are undulating valleys, with mesas and foot-hills intersected by deep cañons, and sentineled here and there by lofty buttes and pinnacles.

Along the mesa, about a quarter of a mile from the river, are numerous evidences of prehistoric occupancy. On almost every prominent point are heaps of debris and rudely squared stones, with an occasional wall remaining intact and projecting above the mounds, marking the homes of the former inhabitants.

Among the most interesting of the art remains found in this locality are the small and delicately formed arrowpoints, equaling in minuteness even those of the Willamette valley in Oregon. They are chipped from obsidian, jasper, moss-agate, and flint of many hues, and because of their translucence and delicate notching are much sought by the present inhabitants of the region. Some measure but half an inch in length, and are of exquisite workmanship.

At intervals along the mesa, and among the ruins, are found many stone axes, closely resembling those unearthed in the East, and many large stone metates, while the ground is literally strewn with fragments of pottery. At one point on the mesa we noticed, around a prairie-dog's burrow, numberless fragments of pottery, also pieces of human bone which the animal had brought to the surface. From these evidences we determined that the site was an ancient burial place, and soon after commencing excavation the sides of a bowl were observed protruding from a side of the pit. This proved to be basin-shaped, rather crudely decorated, and broken at the edges. Taking the earth from the vessel, we found two large bone spoons of unusual form, each evidently made from the femur of an elk or a bear; and one flint knife, about two inches in length and quite sharp. Carefully removing the earth to the left we uncovered a skull, lying face upward, in a good state of preservation. The head lay toward the east, but the legs had been doubled until the knees nearly reached the chest. The body had presumably

been interred in a sitting posture. This skeleton was that of an adult; it was in a fair state of preservation, and lay about a foot and a half beneath the surface. From our experience we felt justified in believing that more pottery would be found near the right hand, and this supposition was verified, for at this point we uncovered a bowl nine inches in diameter and five inches deep, with interior decoration in red. Inside the bowl was a smaller one, and just beyond lay a small cup, two by four inches, in which was a flint knife. Some inches beyond was an earthenware ladle. Most of the large bowls found were covered with thin, round, stone slabs. More objects were found with this burial than with any other individual interment on La Plata river.

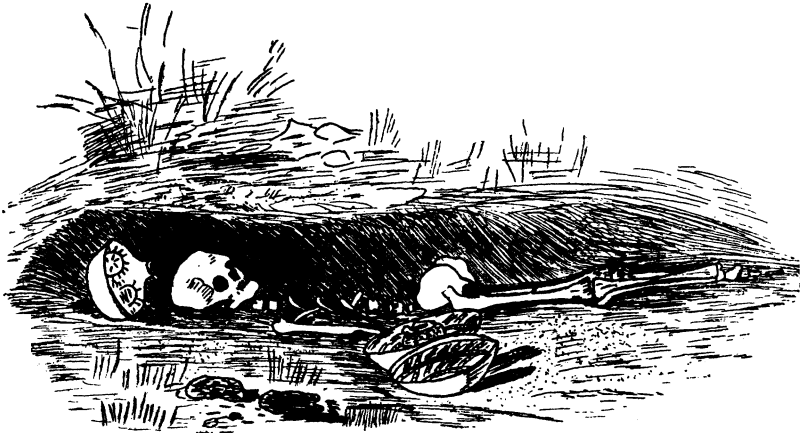


FIG. 77. — Skeleton with accompanying pottery in a La Plata grave.

The largest ruin on the mesa was roughly estimated to contain a hundred rooms. It was originally about three stories high; but at the time of our visit the walls were only a story and a half high, and were so covered with fallen masonry and other debris as to make it sometimes difficult to trace them.

One noticeable feature of this ruin was a passageway formed by two parallel walls two feet apart. One room at the western end showed evidences of having been burned. On the south side of the ruin is a large kiva, thirty-six feet across and of considerable depth. Several lesser kivas are near by. On all sides of this central

pueblo are similar ones extending along the mesas, each in such a ruined state that it was impossible to ascertain exact dimensions without excavation. Roughly estimated, they perhaps contained in all one hundred rooms, which, with those in the central ruin, would make a total of about two hundred rooms on the mesa.

Directly across the river occurs a sandstone ledge, with a dip of eighteen degrees to the south, which may be so easily quarried that

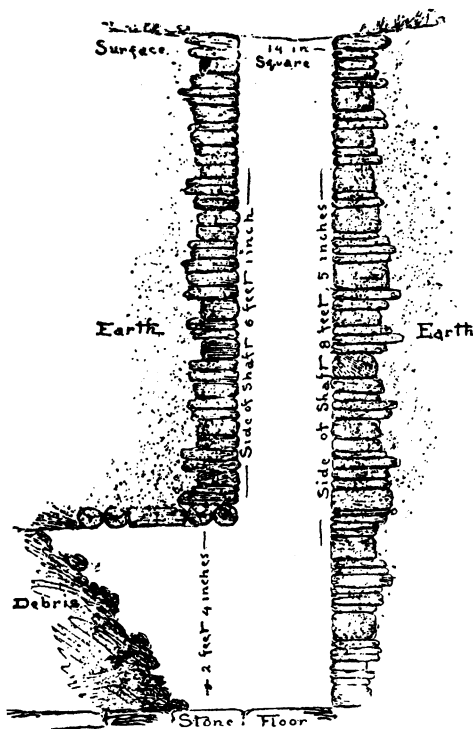


FIG. 78. — The shaft at La Plata.

the ancient builders were enabled to obtain slabs of good building stone with little trouble. Over the graves are invariably found large slabs averaging about three feet in length, two feet in width, and from one to three inches in thickness. Many of these graves were examined, the sandstone slabs having been placed immediately over the skeleton and serving also to protect the vessels. The graves contained perfect pieces of decorated pottery, slightly different from those obtained at Aztec and La Plata; but the skeletons uncovered here

were in such a state of decay that it was not possible to preserve them.

About thirty-six feet southward from the central ruin last described a neatly walled shaft was uncovered, the aperture of which was fourteen inches square. This structure aroused our interest, for chimneys were never built in ancient pueblos, and the presence of a shaft extending straight downward from the surface of the earth was a unique

feature. In excavating we were compelled to take out many large sandstone slabs. At a depth of eight feet and five inches we reached the bottom of the shaft, which was paved with sandstone slabs; here the shaft turned at a right angle toward the north, in which direction was the central ruin. The roof of the shaft, beyond the angle, was composed of oak logs, with here and there an occasional stone slab. The horizontal portion of the shaft was two feet four inches in height and fourteen inches wide, neatly walled up, and entirely filled with earth and stones, which we were compelled to hoist to the surface in buckets.

After following the shaft about four feet farther we were compelled, unfortunately, to abandon the work; and thus were prevented from gaining sufficient evidence to determine the purpose of the structure. It could not have been a chimney, for neither the stones nor the logs showed signs of smoke or heat, although fragments of charcoal were found occasionally during the excavation; nor is it likely that the shaft was used as an air flue for the purpose of ventilation, both on account of the narrowness of the perpendicular portion (fourteen inches), and the apparent disregard manifested by the ancient Southwestern villagers of everything that might tend to promote hygienic conditions.

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